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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,884	01/25/2002	Masato Minami	03560:002446:1	7163

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EXAMINER

RAMSEY, KENNETH J

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/054,884

Applicant(s)

MINAMI ET AL.

Examiner

Kenneth J. Ramsey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 17-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/388,427.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 3.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 17-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 26 of U.S. Patent No. 6,383,047 in view of Yamanobe EP( 788,130). The invention of claim 26, comprises applying a n electroconductive film comprising polyacryllo nitrile between a plurality of pairs of electrodes and a step of forming a gap in the electroconductive film provided between an electrode pair by applying a voltage between the electrodes, wherein the electroconductive film is applied by an ink jet device. Claim 26 differs from the claims solely by the fact that the claims do not require that an amorphous carbon or graphite formation is formed in the film facing the gap. Yamanobe discloses a similar process of applying a voltage to a polyimide or polyacrylnitrile polymer coated electroconductive film to form a gap. In Yamanobe, it is disclosed that glassy (amorphous) carbon is present in the film facing the gap after the forming step. It is the examiner's position

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that at least amorphous carbon or graphite formation would be formed in the film facing the gap in the process of claim 26 since the same materials are used. Thus claims 17, 19, 20 and 22-24 are clearly obvious over claim 26 of the patent. As to claim 18, Yamanobe discloses the use of toluene sulfonate, polyimide and polyacrylnitrile polymers which are all aromatic. As to claims 20 and 21, since the polymer film of patent claim 26 must be conductive, it would have been obvious to one of ordinary skill in the art at the time of applicants' invention to include conductive particles such as metal or graphite in the polymer to control the conductivity of the film since Yamanobe discloses the use of carbon in the electroconductive film 4 at page 8, line 23.

### ***Prior Art Rejections***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-19, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamanobe EP 788,130. Yamanobe, page 9, line 18 through page 9, line 58 discloses forming a gap in an electroconductive film by energization forming to form a cathode wherein a polymer film is applied before or after energization forming and the polymer is carbonized so that a glassy (amorphous) carbon deposit is formed in the gap, i.e. with a layer of amorphous carbon of the film facing the gap. As to claims 18 and 19, Yamanobe, page 9, lines 35 and 40 disclose respectively the use of

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polyacrylnitrile and polyimide which are claimed in claim 19 and are all-aromatic. As to claims 23 and 24, the device of Yamanobe is an image display device.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamanobe in view of Mitome et al EP 805,472. Claim 22 adds the step of depositing the polymer film by an ink jet process. Mitome, figure 26, discloses the use of an ink jet device 151 to deposit a film 153 over the electrodes of a surface conduction cathode. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to have formed the polymer film of Yamanobe by an ink jet device as in Mitome since ink jet printing avoids the necessity of employing more expensive patterning steps to selectively deposit the film.

#### ***Allowable Subject Matter***

Claim 20 and 21 would be allowable if a terminal disclaimer is filed since the prior art does not teach or suggest the step of including an electroconductive material in the polymer film used to form the glassy carbon deposit of a surface conduction device.

#### ***Conclusion***

Any inquiry concerning this communication should be directed to Kenneth J. Ramsey at telephone number 703-308-2324.

  
**KENNETH J. RAMSEY**  
**PRIMARY EXAMINER**